

AMENDMENTS TO THE CLAIMS

Claims 1 to 18 (Cancelled)

19. (Currently Amended) A composite vehicle wheel hub comprising:

a non-cast inner wheel hub portion having an opened inboard end, and opened outboard end, and a generally axially extending main body, said outboard end of said inner wheel hub portion provided with a plurality of lugs spaced circumferentially therearound, said non-cast inner wheel hub portion including a first axially extending connecting portion which defines a first outer diameter; and

a cast outer wheel hub portion joined to said inner wheel hub portion and having a generally stepped body having an opened inboard end, an opened outboard end, and a generally axially extending main body, said main body of said outer wheel hub portion provided with a radially outwardly extending flange, said cast outer wheel hub portion including a second axially extending connecting portion which defines a second outer diameter, said second axially extending connecting portion of said cast outer wheel hub portion located adjacent and joined to said first axially extending connecting portion of said non-cast inner wheel hub portion;

wherein said lugs of said non-cast inner wheel hub portion are embedded in said cast outer wheel hub portion during the casting process to assist in securing said non-cast inner wheel hub portion and said cast outer wheel hub portion together; and

wherein said first outer diameter of said non-cast inner wheel hub portion and said second outer diameter of said cast outer wheel hub portion are equal to one another thereby defining a constant outer diameter circumferentially along the entire axial length of said axially extending connecting portions thereof.

20. (Original) The composite vehicle wheel hub according to Claim 19 wherein said inner wheel hub portion is formed from steel and said outer wheel hub portion is formed from cast iron.

21. (Original) The composite vehicle wheel hub according to Claim 19 wherein said opened inboard end of said inner wheel hub portion includes a center flange.

22. (Withdrawn) A method for producing a composite vehicle wheel hub comprising the steps of:

- (a) providing one of an inner wheel hub portion and an outer wheel hub portion formed from a first material;
- (b) placing the one of the inner wheel hub portion and the outer wheel hub portion in a mold;
- (c) casting the other one of the inner wheel hub portion and the outer wheel hub portion formed from a second material in situ within the mold to thereby produce the composite vehicle wheel hub; and
- (d) removing the composite vehicle wheel hub from the mold.

23. (Withdrawn) The method for producing a composite vehicle wheel hub according to Claim 22 wherein the one of the inner wheel hub portion and the outer wheel hub portion of step (a) is provided with a plurality of lugs which are embedded in the outer wheel hub portion during step (c).

24. (Withdrawn) The method for producing a composite vehicle wheel hub according to Claim 22 wherein the inner wheel hub portion is provided in steps (a) and (b) and is formed from steel and the outer wheel hub portion cast in step (c) is formed from cast iron.

25. (Withdrawn) The method for producing a composite vehicle wheel hub according to Claim 24 wherein the cast iron outer wheel hub portion includes a generally stepped body having an opened inboard end, an opened outboard end, and a generally axially extending main body, the main body provided with a radially outwardly extending flange.

26. (Withdrawn) The method for producing a composite vehicle wheel hub according to Claim 24 wherein the steel inner wheel hub portion includes an opened inboard end, and opened outboard end, and a generally axially extending main body, the outboard end provided with a plurality of lugs spaced circumferentially therearound.

27. (Withdrawn) The method for producing a composite vehicle wheel hub according to Claim 24 wherein the cast iron outer wheel hub portion includes a generally stepped body having an opened inboard end, an opened outboard end, and a generally axially extending main body, the main body of the outer wheel hub portion provided with a radially outwardly extending flange, and wherein the steel inner wheel hub portion includes an opened inboard end, and opened outboard end, and a generally axially extending main body, the outboard end of the inner wheel hub portion provided with a plurality of lugs spaced circumferentially therearound which are embedded in the outer wheel hub portion during the casting process.

28. (Withdrawn) The method for producing a composite vehicle wheel hub according to Claim 22 wherein the inner wheel hub portion is provided in steps (a) and (b) and is formed from cast iron and the outer wheel hub portion cast in step (c) is formed from cast iron.

29. (Withdrawn) The method for producing a composite vehicle wheel hub according to Claim 22 wherein the outer wheel hub portion is provided in steps (a) and (b) and is formed from steel and the inner wheel hub portion cast in step (c) is formed from cast iron.

30. (Withdrawn) The method for producing a composite vehicle wheel hub according to Claim 22 wherein the outer wheel hub portion is provided in steps (a) and (b) and is formed from cast iron and the inner wheel hub portion cast in step (c) is formed from cast iron.

31. (New) The composite vehicle wheel hub according to Claim 19 further including a bearing assembly supported on at least a portion of one of said outer wheel hub portion and said inner wheel hub portion.

32. (New) The composite vehicle wheel hub according to Claim 19 further including a bearing assembly supported on at least a portion of both of said outer wheel hub portion and said inner wheel hub portion.

33. (New) The composite vehicle wheel hub according to Claim 19 wherein said inner wheel hub portion and said outer wheel hub portion are non-rotationally joined together.

34. (New) A composite vehicle wheel hub comprising:

an inner wheel hub portion having an opened inboard end, and opened outboard end, and a generally axially extending main body, said outboard end of said inner wheel hub portion provided with a plurality of lugs spaced circumferentially therearound, said non-cast inner wheel hub portion including a first axially extending connecting portion which defines a first outer diameter; and

an outer wheel hub portion joined to said inner wheel hub portion and having a generally stepped body having an opened inboard end, an opened outboard end, and a generally axially extending main body, said main body of said outer wheel hub portion provided with a radially outwardly extending flange, said cast outer wheel hub portion including a second axially extending connecting portion which defines a second outer diameter, said second axially extending connecting portion of said cast outer wheel hub portion located adjacent to and joined to said first axially extending connecting portion of said non-cast inner wheel hub portion;

wherein said lugs of said inner wheel hub portion are adapted to be embedded in said outer wheel hub portion during a casting process to assist in securing said inner wheel hub portion and said wheel hub portion together; and

wherein said first outer diameter of said non-cast inner wheel hub portion and said second outer diameter of said cast outer wheel hub portion are equal to one another thereby defining a constant outer diameter circumferentially along the entire axial length of said axially extending connecting portions thereof .

35. (New) The composite vehicle wheel hub according to Claim 34 wherein said inner wheel hub portion is formed from a non-cast material and said outer wheel hub portion is formed from a cast material.

36. (New) The composite vehicle wheel hub according to Claim 35 wherein said non-cast material is steel and said cast material is cast iron.

37. (New) The composite vehicle wheel hub according to Claim 34 wherein said inner wheel hub portion is formed from a cast material and said outer wheel hub portion is formed from a non-cast material.

38. (New) The composite vehicle wheel hub according to Claim 34 wherein said opened inboard end of said inner wheel hub portion includes a center flange.

39. (New) The composite vehicle wheel hub according to Claim 34 further including a bearing assembly supported on at least a portion of one of said outer wheel hub portion and said inner wheel hub portion.

40. (New) The composite vehicle wheel hub according to Claim 34 further including a bearing assembly supported on at least a portion of both of said outer wheel hub portion and said inner wheel hub portion.

41. (New) The composite vehicle wheel hub according to Claim 34 wherein said inner wheel hub portion and said outer wheel hub portion are non-rotationally joined together.

42. (New) A composite vehicle wheel hub comprising:

an inner wheel hub portion having an opened inboard end, and opened outboard end, and a generally axially extending main body, said outboard end of said inner wheel hub portion provided with a plurality of lugs spaced circumferentially therearound; and

an outer wheel hub portion non-rotationally joined to said inner wheel hub portion and having a generally stepped body having an opened inboard end, an opened outboard end, and a generally axially extending main body, said main body of said outer wheel hub portion provided with a radially outwardly extending flange;

wherein said lugs of said inner wheel hub portion are adapted to be embedded in said outer wheel hub portion to thereby assist in non-rotationally securing said non-cast inner wheel hub portion and said cast outer wheel hub portion together.

43. (New) The composite vehicle wheel hub according to Claim 42 wherein said lugs are further operative to join said inner wheel hub portion to said outer wheel hub portion to prevent axial movement relative to each other.

44. (New) The composite vehicle wheel hub according to Claim 42 wherein said inner wheel hub portion is formed from a non-cast material and said outer wheel hub portion is formed from a cast material.

45. (New) The composite vehicle wheel hub according to Claim 42 wherein said non-cast material is steel and said cast material is cast iron.

46. (New) The composite vehicle wheel hub according to Claim 42 wherein said inner wheel hub portion is formed from a cast material and said outer wheel hub portion is formed from a non-cast material.

47. (New) The composite vehicle wheel hub according to Claim 42 wherein said opened inboard end of said inner wheel hub portion includes a center flange.

48. (New) The composite vehicle wheel hub according to Claim 42 further including a bearing assembly supported on at least a portion of one of said outer wheel hub portion and said inner wheel hub portion.

49. (New) The composite vehicle wheel hub according to Claim 42 further including a bearing assembly supported on at least a portion of both of said outer wheel hub portion and said inner wheel hub portion.